

Amendments to the Specification

Please replace the paragraph beginning at page 2, line 22, with the following rewritten paragraph:

Patent Document 1;

Japanese Patent ~~Unexamined Publication No. 2001-226747~~ No. 3542754,

Please replace the paragraph beginning at page 3, line 1, with the following rewritten paragraph:

We believe that the inventions proposed in the aforementioned prior applications facilitate astonishing progress in the shape memory alloy technology, contribute to put the shape memory alloy to practical use for the future, and greatly contribute to the development of industry. However, there are still some points to be improved in proposed inventions. As for the two latter prior applications (Patent Document 2, Patent Document 3), the inventions proposed in these applications are significantly meaningful because the ~~quite easy treatment process is achieved as well as further improved shape memory performance of alloy.~~ In addition, it was recognized that ~~the shape memory performance is therefore dramatically improved, thus dramatically increasing the degree of practical use~~ necessary thermomechanical treatments are quite easy compared with the training and yet well improved shape memory performance of the alloy is obtained. Thus the degree of practical use is dramatically increased. That is, the works and effects of the inventions of these applications are quite noticeable. However, there still remains a problem that the treatment process requires a heating treatment in a high temperature range of from 500°C to 800°C, which causes difficulties in most cases. It is undeniable that this point makes it difficult to put the shape memory alloys to practical use.

Preliminary Amendment
Attorney Docket No. 043075

Please replace the paragraph beginning at page 6, line 20, with the following rewritten paragraph:

As a thermomechanical treatment for a Fe-Mn-Si-based shape memory alloy having specified components with Nb, C addition, ~~conventionally, the processing treatment the deformation prior to aging is carried out by training. Alternatively, in the inventions of the prior applications, the processing treatment prior to aging is carried out in a temperature range of from 500°C to 800°C in the inventions of the prior applications.~~ According to the present invention, however, the ~~processing treatment~~ deformation prior to the aging treatment can be successfully carried out ~~not at~~ without high temperature~~[, i.e.]~~ but at room temperature~~[,]~~ by setting a processing the deformation ratio in a specified range.

Please replace the paragraph beginning at page 8, line 26, with the following rewritten paragraph:

2) The Fe-Mn-Si-based shape memory alloy with Nb, C addition has the following compositions Mn: 15% to 40% by weight, Si: 3% to 15% by weight, Cr: 1% to 20% by weight, Nb: 0.1% to 1.5% by weight, C: 0.01% to 0.2% by weight, and Fe and inevitable impurities: residual amount, wherein the atomic ratio Nb/C between Nb and C is 1 or more;

3) The Fe-Mn-Si-based shape memory alloy with Nb, C addition has the following compositions Mn: 15% to 40% by weight, Si: 3% to 15% by weight, Cr: 1% to 20% by weight, Ni: 0.1% to 20% by weight, Nb: 0.1% to 1.5% by weight, C: 0.01% to 0.2% by weight, and Fe and inevitable impurities: residual amount, wherein the atomic ratio Nb/C between Nb and C is 1 or more.

Preliminary Amendment
Attorney Docket No. 043075

Please replace the paragraph beginning at page 14, line 20, with the following rewritten paragraph:

The present invention provides a thermomechanical treatment means for a Fe-Mn-Si-based shape memory alloy having specified components with Nb, C addition with simple processing deformation treatment prior to aging. Conventionally, the processing In the inventions of the prior applications, the deformation treatment prior to aging is carried out by training. Alternatively, in the inventions of the prior applications, the processing treatment prior to aging is carried out in a temperature range of from 500°C to 800°C. According to the present invention, however, the processing deformation treatment prior to the aging treatment can be successfully carried out without not at high temperature[[, i.e.]] but at room temperature, if using a processing the deformation ratio is in a specified range.